

**ABSTRACT**

An RF amplifier circuit 21 for amplifying AM broadcast signals is constituted by use of cascaded P channel MOSFETs 4 and 5. This cascade connection realizes a reduction of the feedback capacitance between the source and gate of the P channel MOSFET 4, thereby providing a stable operation. Further, using the P channel MOSFETs to constitute the amplifier circuit realizes a reduction of flicker noise and allows the amplifier circuit to be manufactured by the same CMOS process as the CMOS digital circuit.